

## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (Currently Amended) A method for the production of plastics containing fillers, characterized in that **comprising the steps of:**
  - a reactive precursor of the filler is mixed the polymer precursor;
  - the reactive precursor of the filler is converted into the filler and
  - the polymer precursor is polymerized to give the plastic
  - a) **mixing a reactive precursor of the filler with a precursor of the plastic to form a mixture;**
  - b) **converting the reactive precursor of the filler in said mixture into the filler; and**
  - c) **polymerizing the precursor of the plastic in said mixture to give the plastic.**
2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ **wherein** the fillers are selected from inorganic compounds whose particle size is preferably less than 300 nm, but as far as possible even smaller and in particular 5-50 nm with a narrow size distribution.
3. (Currently Amended) The method as claimed in claim 1, **wherein** or 2, ~~characterized in that~~ the fillers are selected from **the group consisting of** oxides, sulfides, phosphates, carbonates, **and** fluorides, particularly from  $\text{Mg}(\text{OH})_2$ ,  $\text{Mg}_6\text{Al}_2(\text{OH})_{16}(\text{CO}_3)_7$ ,  $\text{SiO}_2$ ,  $\text{TiO}_2$ ,  $\text{ZrO}_2$ ,  $\text{BaTiO}_3$ ,  $\text{PbZrO}_3$ ,  $\text{LiNbO}_3$ , zeolite,  $\text{MgO}$ ,  $\text{CaO}$ ,  $\text{ZnO}$ ,  $\text{Fe}_3\text{O}_4$ ,  $\text{ZnS}$ ,  $\text{CdS}$ ,  $\text{CaCO}_3$ ,  $\text{BaCO}_3$ ,  $\text{CaSO}_4$ ,  $\text{CaF}_2$  and  $\text{BaF}_2$ .

4. (Currently Amended) The method as claimed in ~~any of claims~~ claim 1, wherein ~~to 3, characterized in that~~ the polymer precursor is present in the oil phase of a w/o emulsion.
5. (Currently Amended) The method as claimed in claim 4, ~~characterized in that~~ wherein the reactive precursor of the filler reacts with the, or in the, water present in the emulsion with formation of the filler.
6. (Currently Amended) The method as claimed in ~~any of claims~~ claim 1, wherein ~~to 5, characterized in that~~ the polymerization of the polymer precursor is effected as mass polymerization.
7. (Currently Amended) The method as claimed in ~~any of claims~~ claim 1, wherein ~~to 6, characterized in that~~ the plastic is selected from the group consisting of transparent plastics, ~~in particular based on polyacrylic acids and salts thereof, polymethacrylic acid and salts thereof, polystyrenes, polyolefins and any desired copolymers of the above.~~
8. (Currently Amended) The method as claimed in ~~any of claims~~ claim 1, which is carried out to 7 for the production of transparent moldings.
9. (Currently Amended) The method as claimed in ~~any of claims~~ claim 1, which is carried out to 7 for the production of transparent coatings on surfaces.
10. (New) The method as claimed in claim 3, wherein the fillers are selected from the group consisting of  $\text{Mg}(\text{OH})_2$ ,  $\text{Mg}_6\text{Al}_2(\text{OH})_{16}(\text{CO}_3)$ ,  $\text{SiO}_2$ ,  $\text{TiO}_2$ ,  $\text{ZrO}_2$ ,  $\text{BaTiO}_3$ ,  $\text{PbZrO}_3$ ,  $\text{LiNbO}_3$ , zeolite,  $\text{MgO}$ ,  $\text{CaO}$ ,  $\text{ZnO}$ ,  $\text{Fe}_3\text{O}_4$ ,  $\text{ZnS}$ ,  $\text{CdS}$ ,  $\text{CaCO}_3$ ,  $\text{BaCO}_3$ ,  $\text{CaSO}_4$ ,  $\text{CaF}_2$  and  $\text{BaF}_2$ .
11. (New) The method as claimed in claim 7, wherein the plastic is selected from the group consisting of transparent plastics based on polyacrylic acids and salts thereof,

polymethacrylic acid and salts thereof, polystyrenes, polyolefins and copolymers of the above.